

## SEQUENCE LISTING

<110> PROUDFOOT, AMANDA  
 SHAW, JEFFREY  
 JOHNSON, ZOE

<120> THERAPEUTIC USES OF CHEMOKINE VARIANTS

<130> ARS-124

<140> US 10/573,625

<141> 2006-03-28

<150> EP 03078308

<151> 2003-10-16

<160> 5

<170> PatentIn version 3.0

<210> 1

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<223> Human CCL2

<400> 1

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Pro | Asp | Ala | Ile | Asn | Ala | Pro | Val | Thr | Cys | Cys | Tyr | Asn | Phe | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Arg | Lys | Ile | Ser | Val | Gln | Arg | Leu | Ala | Ser | Tyr | Arg | Arg | Ile | Thr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Lys | Cys | Pro | Lys | Glu | Ala | Val | Ile | Phe | Lys | Thr | Ile | Val | Ala |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Glu | Ile | Cys | Ala | Asp | Pro | Lys | Gln | Lys | Trp | Val | Gln | Asp | Ser | Met |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | His | Leu | Asp | Lys | Gln | Thr | Gln | Thr | Pro | Lys | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |

<210> 2

<211> 76

<212> PRT

<213> synthetic construct

<220>

<223> Human CCL2-P8A

&lt;400&gt; 2

Gln Pro Asp Ala Ile Asn Ala Ala Val Thr Cys Cys Tyr Asn Phe Thr  
 1 5 10 15  
 Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr  
 20 25 30  
 Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala  
 35 40 45  
 Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Met  
 50 55 60  
 Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr  
 65 70 75

&lt;210&gt; 3

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; synthetic construct

&lt;220&gt;

&lt;223&gt; Human CCL2\*

&lt;400&gt; 3

Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys Tyr Asn Phe Thr  
 1 5 10 15  
 Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr  
 20 25 30  
 Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala  
 35 40 45  
 Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Ile  
 50 55 60  
 Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr  
 65 70 75

&lt;210&gt; 4

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; synthetic construct

&lt;220&gt;

&lt;223&gt; Human CCL2\*-P8A

&lt;400&gt; 4

Gln Pro Asp Ala Ile Asn Ala Ala Val Thr Cys Cys Tyr Asn Phe Thr

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1           5           10           15
Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr
      20           25           30
Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala
      35           40           45
Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Ile
      50           55           60
Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr
      65           70           75

<210> 5
<211> 331
<212> PRT
<213> synthetic construct

<220>
<223> Human CCL2-P8A_IgG1 fusion protein

<400> 5

Met Lys Val Ser Ala Ala Leu Leu Cys Leu Leu Leu Ile Ala Ala Thr
1           5           10           15
Phe Ile Pro Gln Gly Leu Ala Gln Pro Asp Ala Ile Asn Ala Ala Val
      20           25           30
Thr Cys Cys Tyr Asn Phe Thr Asn Arg Lys Ile Ser Val Gln Arg Leu
      35           40           45
Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys Cys Pro Lys Glu Ala Val
      50           55           60
Ile Phe Lys Thr Ile Val Ala Lys Glu Ile Cys Ala Asp Pro Lys Gln
      65           70           75           80
Lys Trp Val Gln Asp Ser Met Asp His Leu Asp Lys Gln Thr Gln Thr
      85           90           95
Pro Lys Thr Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
      100           105           110
Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
      115           120           125
Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
      130           135           140
Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
      145           150           155           160

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Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg  
 165 170 175  
 Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val  
 180 185 190  
 Leu His Asn Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser  
 195 200 205  
 Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys  
 210 215 220  
 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu  
 225 230 235 240  
 Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe  
 245 250 255  
 Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Gln Gly Gln Pro Glu  
 260 265 270  
 Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe  
 275 280 285  
 Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly  
 290 295 300  
 Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr  
 305 310 315 320  
 Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 325 330